

Serial No.: 10/822,004
Docket No.: 101-1028
Amendment dated: February 21, 2008
Reply to the Office Action of November 27, 2007

REMARKS

Introduction

Applicant notes with appreciation the Examiner's indication that each of the references cited in the Information Disclosure Statement of August 28, 2007, has been considered.

Upon entry of the foregoing amendment, claims 1-27 and 29-41 are pending in the application. Claims 1, 6-7, 12, and 40 have been amended and claim 41 has been added. No new matter is being presented. In view of the following remarks, reconsideration and allowance of all the pending claims are requested.

1. Acknowledgement of application papers

The Applicants note that in the Office Action of November 27, 2007 (hereinafter the "Office Action"), the Examiner has again not indicated whether the drawings filed have been accepted. The Applicants respectfully request that the acceptability of the drawings be acknowledged.

2. Rejection under 35 USC §102(b): Abe et al.:

Claims 1, 3, 5-6, and 40 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Publication No. 2003/0086732 to Abe et al. Applicants respectfully request reconsideration and withdrawal of this rejection for at least the following reasons.

a. Claim 1:

With respect to independent claim 1, Applicants respectfully submit that claim 1 is currently amended to clarify a sequential mounting of photosensitive drum unit and the intermediate transfer unit in order to further distinguish the invention as claimed from the cited documents. As amended, none of the references cited by the Examiner disclose, teach, or suggest all of the limitations recited in independent claim 1.

In particular, Abe et al. describes an image forming apparatus where a transfer belt unit 9 is first mounted on a pivotable section 50, an image forming unit 7 is then also mounted on the second movable section 50, and finally, the pivotable section 50 and a pivotable section 3 are rotated into/out of the image forming apparatus. See Abe et al., paragraphs [0036, 0070-72],

FIG. 8. That is, transfer belt unit 9 is first mounted on the second movable section 50, the image forming unit 7 is mounted over the transfer belt 9, and these units are mounted or dismounted into the image forming apparatus by the pivoting movement of the second pivoting section 50 pivots around the shaft 66. *Id.* Abe et al. does not describe that the transfer belt unit 9 and the image forming unit 7 are installed through an upper side of the main frame, nor does Abe et al. describe installing the image forming unit 7 first and then installing the transfer belt unit above the image forming unit 7. Thus, Applicants submit that Abe et al. does not disclose or teach, among other things, "wherein the photosensitive drum unit and the intermediate transfer unit are sequentially mounted and dismounted into and from the internal space through the upper side of the main frame, the photosensitive drum unit being firstly mounted, the intermediate transfer unit is installed above the photosensitive drum unit, and the photosensitive drum unit and the intermediate transfer unit operate in the drum operating position and the transfer unit operating position, respectively," as presently recited in independent claim 1.

Accordingly, it is respectfully submitted that since Abe et al. does not teach all of the elements set forth in claim 1, as presently recited, independent claim 1 is patentably distinguishable from Abe et al., and withdrawal of this rejection and allowance of this claim are respectfully solicited.

b. Claims 3 and 5:

With respect to claims 3 and 5, it is respectfully submitted that for at least the reason that these claims depend from independent claim 1, which is patentably distinguishable from Abe et al. for at least the reasons provided above, and therefore contain each of the features as presently recited in independent claim 1, dependent claims 3 and 5 are also patentably distinguishable from Abe et al., and withdrawal of this rejection and allowance of these claim are respectfully solicited.

c. Claim 6:

With respect to claim 6, Applicant respectfully submits that this claim depends from independent claim 1, which is patentably distinguishable from Abe et al. for at least the reasons provided above. Accordingly, for at least the reason that claim 6 contains each of the features as presently recited in independent claim 1, this claim is also patentably distinguishable from

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Abe et al.

Furthermore, Applicants respectfully submit that claim 6 is currently amended to clarify an operation of the developing units in order to further distinguish the invention as claimed from the cited documents.

In particular, Abe et al. describes that an image forming unit 7 and a transfer belt unit 9 are both disposed on a second movable section 50. See Abe et al., paragraphs [0036, 0070-72], FIG. 8. However, the image forming unit 7 comprises Y, M, C, and K, image forming stations, i.e. developing units. See Abe et al., paragraph [0043]. That is, each of the image forming stations, Y, M, C, and K, have an individual photosensitive drum, with each photosensitive drum separately transferring the developed latent image to the intermediate transfer belt 14. *Id.* This is not the same as “a plurality of development units each having a developing roller to form the toner image by supplying toner to the electrostatic latent image formed on the same photosensitive drum,” as presently recited in claim 6.

Accordingly, it is respectfully submitted that since Abe et al. does not disclose or teach all of the limitations presently recited in this claim, claim 6 is itself patentably distinguishable from Abe et al., and withdrawal of this rejection and allowance of this claim are earnestly solicited.

d. Claim 40:

With respect to independent claim 40, Applicants respectfully submit that this claim is currently amended to clarify the photosensitive drum unit in order to further distinguish the invention as claimed from the cited documents. Accordingly, it is respectfully submitted that none of the references cited by the Examiner discloses, teaches, or suggests all of the limitations presently recited in independent claim 40.

In particular, as described above, in Abe et al. the transfer belt unit 9 is first mounted on the second movable section 50, the image forming unit 7 is then mounted over the transfer belt 9, and these units are mounted or dismounted into the image forming apparatus by the pivoting movement of the second pivoting section 50 pivots around the shaft 66. See Abe et al., paragraphs [0036, 0070-72], FIG. 8. Abe et al. does not describe that the transfer belt unit 9 and the image forming unit 7 are installed through an upper side of the main frame. Thus, Applicants submit that Abe et al. does not disclose or teach, among other things, “wherein the

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photosensitive drum unit and the intermediate transfer unit are sequentially mounted and dismounted into and from the internal space through the upper side of the main frame, and an electrostatic latent image formed on the photosensitive drum is developed by at least two developing rollers and transferred to the intermediate transfer unit from the photosensitive drum,” as recited in independent claim 40.

Furthermore, Abe et al. describes that an image forming unit 7 comprises Y, M, C, and K, image forming stations, i.e. developing units. See Abe et al., paragraph [0043]. That is, each of the image forming stations, Y, M, C, and K, have an individual photosensitive drum, with each photosensitive drum separately transferring the developed latent image to the intermediate transfer belt 14. *Id.* In other words, Abe et al. is directed to a printer having four photosensitive drums and four developing units to develop electrostatic latent images on the four corresponding photosensitive drums. This is not the same as at least two developing rollers to develop an electrostatic latent image on a single photosensitive drum, as presently recited in claim 40. Accordingly, Abe et al. does not disclose or teach, among other things, “a photosensitive drum unit detachably installed in the internal space of the main frame through an upper side of the main frame, and having a single photosensitive drum on which an electrostatic latent image is formed,” as presently recited in claim 40.

Accordingly, it is respectfully submitted that since Abe et al. does not teach all of the elements set forth in claim 40, as presently recited, independent claim 40 is patentably distinguishable from Abe et al., and withdrawal of this rejection and allowance of this claim are respectfully solicited.

3. Rejection under 35 USC §103(a): Abe et al. and Nonami:

Claims 2, 4, and 7-13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Abe et al. and further in view of U.S. Patent No. 4,837,598 to Nonami. Applicants respectfully request reconsideration and withdrawal of this rejection for at least the following reasons.

a. Claims 2 and 4:

With respect to claims 2 and 4, it is respectfully submitted that for at least the reason that these claims depend from independent claim 1, which is allowable over Abe et al. for at least

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the reasons pointed out above, and therefore contain each of the features as presently recited in claim 1, dependent claims 2 and 4 are also allowable over Abe et al. Further, since Nonami does not teach or suggest any of the limitations which are lacking in Abe et al., this claim is allowable over both Abe et al. and Nonami, separately or in combination. Accordingly, withdrawal of this rejection and allowance of these claims are respectfully requested.

b. Claim 7:

With respect to claim 7, Applicant respectfully submits that this claim depends from independent claim 1, which is patentably distinguishable from Abe et al. for at least the reasons provided above. Accordingly, for at least the reason that claim 7 contains each of the features as presently recited in independent claim 1, this claim is also patentably distinguishable from Abe et al. Further, since Nonami does not teach or suggest any of the limitations which are lacking in Abe et al., this claim is allowable over both Abe et al. and Nonami, separately or in combination.

Moreover, Applicants respectfully submit that claim 7 is currently amended to clarify a position of the plurality of development units in order to further distinguish the invention as claimed from the cited documents. In particular, as described above, Abe et al. describes that an image forming unit 7 comprises Y, M, C, and K, image forming stations, i.e. developing units. See Abe et al., paragraph [0043]. However, each individual image forming stations is positions to directly correspond to an individual photosensitive drum. *Id.* This is not the same as “wherein each of the plurality of development units further comprises a position determining unit to maintain a developing gap between the developing roller and the photosensitive drum and to position the plurality of development units to partially surround the photosensitive drum, such that the photosensitive drum cannot be removed without first at least partially removing at least one top most of the plurality of development units in a horizontal direction,” as presently recited in claim 7.

Accordingly, it is respectfully submitted that claim 7 is itself patentably distinguishable over Abe et al. and Nonami, either individually or combined, and withdrawal of this rejection and allowance of this claim are earnestly solicited.

c. Claims 8-10:

With respect to claims 8-10, it is respectfully submitted that these claims depend from independent claim 1, which is allowable over Abe et al. for at least the reasons pointed out above. Accordingly, since these claims contain each of the features as presently recited in claim 1, dependent claims 8-10 are also allowable over Abe et al. Further, since Nonami does not teach or suggest any of the limitations which are lacking in Abe et al., claims 8-10 are allowable over both Abe et al. and Nonami, separately or in combination, and withdrawal of this rejection and allowance of these claims are respectfully requested.

d. Claims 11-13:

With respect to claims 11-13, it is respectfully submitted that these claims depend from independent claim 1, which is allowable over Abe et al. for at least the reasons pointed out above. Accordingly, since these claims contain each of the features as presently recited in claim 1, dependent claims 11-13 are also allowable over Abe et al. Further, since Nonami does not teach or suggest any of the limitations which are lacking in Abe et al., claims 11-13 are allowable over both Abe et al. and Nonami, separately or in combination.

Furthermore, while on page 4 of the Office Action, the Examiner "takes official notice that it is known in the art to use a pre-transfer eraser," the Examiner does not address the specific limitations regarding the pre-transfer eraser recited in this claim. For example, claim 11 recites that the pre-transfer erasing lens is "movably installed such that it moves to an erasure position at which the pre-transfer erasing lens is close to the photosensitive drum to provide erasure, and to a retracted position spaced apart from the photosensitive drum so as not to interfere therewith when the photosensitive drum unit is mounted or dismounted." This limitation is not addressed by the Examiner's broad statement that "it is known in the art to use a pre-transfer eraser." Similarly, claim 13 recites "wherein the pre-transfer erasing unit further comprises an elastic member to provide elasticity in a direction in which the pre-transfer erasing lens moves to the retracted position, the pre-transfer erasing lens contacting a leading edge of the uppermost development unit when the development unit is mounted, to move to the erasure position, and the pre-transfer erasing lens returning to the retracted position by the elasticity of the elastic member when the uppermost development unit is retracted." This limitation is also not addressed by the Examiner. Similarly, claim 12 is currently amended to clarify a position of the

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pre-transfer eraser. However, the Examiner's blanket type rejection based on the official notice that "it is known in the art to use a pre-transfer eraser," would not address the limitations recited therein. Such blanket type coverage rejections do not provide Applicant with an opportunity to respond to the Examiner's assertions as to whether any of the claimed features or process operations are the same or different from the cited references or as well-known in the art.

Accordingly, Applicant respectfully submits that the rejection of claims 11-13 in view of Abe et al. and Nonami, added with the Examiner's official notice is inadequate and improper, and withdrawal of this rejection and allowance of these claims are respectfully solicited.

4. Rejection under 35 USC §103(a): Abe et al. and Hamano et al.:

Claims 14-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Abe et al. and further in view of U.S. Publication No. 2004/0170450 to Hamano et al. Applicants respectfully request reconsideration and withdrawal of this rejection for at least the following reasons.

With respect to claims 14-18, it is respectfully submitted that these claims depend from independent claim 1, which is allowable over Abe et al. for at least the reasons pointed out above. Accordingly, for at least the reason that claims 14-18 contain each of the features as presently recited in claim 1, dependent claims 14-18 are also allowable over Abe et al. Further, since Hamano et al. does not teach or suggest any of the limitations which are lacking in Abe et al., this claim is allowable over both Abe et al. and Hamano et al., separately or in combination.

Accordingly, Applicants respectfully submit that claims 14-18 are patentable over Abe et al. and Hamano et al., separately or in combination, and withdrawal of the rejection and allowance of these claims are earnestly solicited.

5. New Claim:

New claim 41 has been added. Support from new claim 41 can be found in the specification and drawings, for example, in FIG. 8 and in paragraphs [0068-0070]. New claim 41 depends from independent claim 40 and further defines characteristics recited therein, which are not disclosed, taught, or suggested in the prior art of record.

Accordingly, it is respectfully submitted that new claim 41 does not present new matter

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and is allowable over the prior art of record, and thus, allowance of this claim is earnestly solicited.

Conclusion

It is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, there being no other objections or rejections, this application is in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided below.

If any further fees are required in connection with the filing of this amendment, please charge the same to our Deposit Account No. 502827.

Respectfully submitted,

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